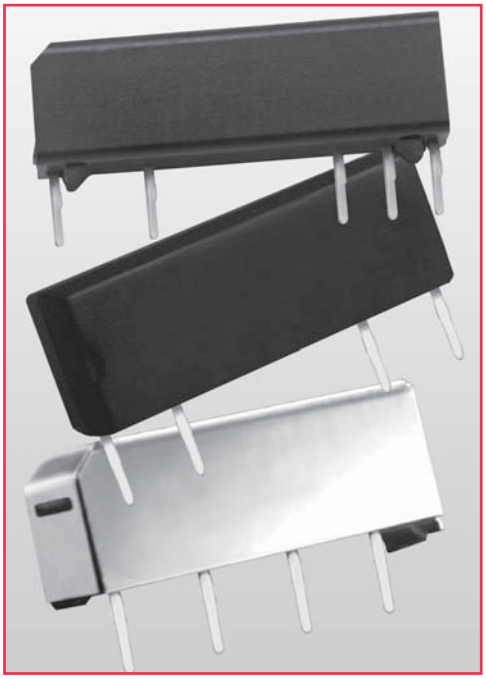
查询9081C-05-00供应商

# 9000 Series/Spartan SIP Reed Relays



## Economy SIP Reed Relays

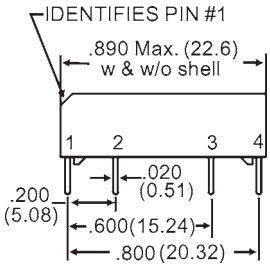
The SIP relay is the industry choice for a wide variety of designs where economy, performance and a compact package are needed. The 9007 Spartan Series is a general purpose economy version of the 9001 for applications with less stringent requirements. The 9081 Spartan Series is similar to the 9007, but with alternate industry standard footprints to accommodate other options, including Form C types. These relays are well suited for applications in Security, Instrumentation and Modems. The specification tables allow you to select the appropriate relay for your application.

## Series Features

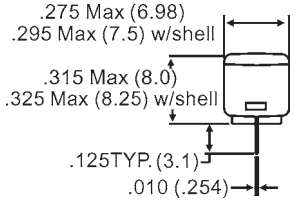
- Hermetically sealed contacts for long life
- High dielectric strength available, consult factory
- High speed switching compared to electromechanical relays
- Molded thermoset body on integral lead frame design
- Form C available (9081C)
- Optional Coil Suppression Diode - protects coil drive circuits
- UL File # E67117, CSA File # LR 28537

*Dimensions in Inches (Millimeters)*

### Model 9081

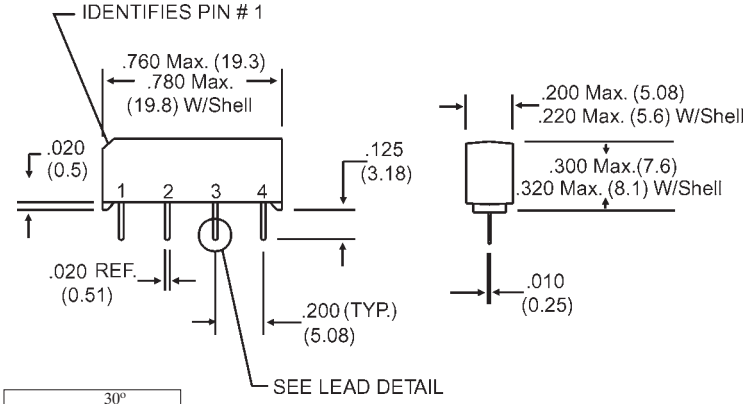


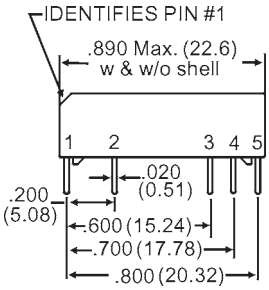

9081



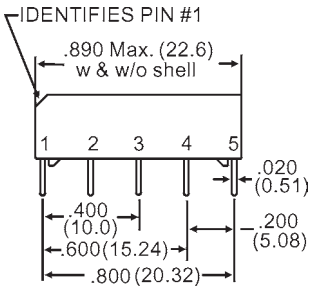

End View - 9081, 9081C & 9081C1

### Model 9007

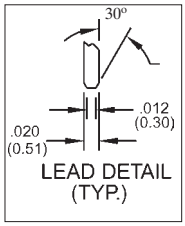



9081C




9081C1




### Ordering Information

Part Number 90XX-XX-XX

**Model Number**
9007 9081 9081C 9081C1

**Coil Voltage**
05=5 volts 12=12 volts
24 = 24 volts

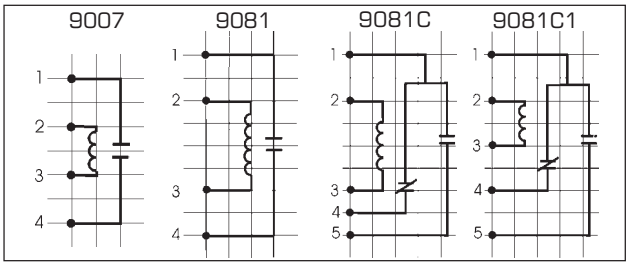
**Magnetic Shield Option**
0= No Shield
1= Shield (External)
4= High-Sensitivity Coil w/Mag. Shield (5V & 12V only); N/A 9081C
5 =High-Sensitivity Coil w/o Mag. Shield (12V only); N/A 9081C

**General Options**
0=No Diode
1=Diode [2] (9007 Only)
2=Form B Contacts (Normally Closed [3])
(Available on 5V only)

# 9000 Series/Spartan SIP Reed Relays

| Model Number | | | 9007 [2] | | | 9081 | | | 9081C | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Parameters** | **Test Conditions** | **Units** | **.2 -.2 -.2 SIP** | | | **.2 -.4 -.2 SIP** | | | **.2 -.2 -.2 -.2 SIP<br>.2 -.4 -.1 -.1 SIP** | | |
| **COIL SPECS.** | | | | | | | | | | | |
| Nom. Coil Voltage | | VDC | 5 | 12 | 24 | 5 | 12 | 24 | 5 | 12 | 24 |
| Max. Coil Voltage | | VDC | 6.5 | 15.0 | 32.0 | 6.5 | 15.0 | 32.0 | 6.5 | 15.0 | 32.0 |
| Coil Resistance (standard) | +/- 10%, 25° C | Ω | 500 | 1000 | 2000 | 500 | 1000 | 2000 | 125 | 500 | 2000 |
| Coil Resistance (hi-sensitivity) | | Ω | 1000 | 2000 | -- | 1000 | 2000 | -- | -- | -- | -- |
| Operate Voltage | Must Operate by | VDC - Max. | 3.75 | 9.0 | 18.0 | 3.75 | 9.0 | 18.0 | 3.75 | 9.0 | 18.0 |
| Release Voltage | Must Release by | VDC - Min. | 0.4 | 1.0 | 2.0 | 0.4 | 1.0 | 2.0 | 0.4 | 1.0 | 2.0 |
| **CONTACT RATINGS** | | | | | | | | | | | |
| Switching Voltage | Max DC/Peak AC Resist. | Volts | 200 | | | 200 | | | 175 | | |
| Switching Current | Max DC/Peak AC Resist. | Amps | 0.5 | | | 0.5 | | | 0.4 | | |
| Carry Current | Max DC/Peak AC Resist. | Amps | 1.0 | | | 1.0 | | | 1.0 | | |
| Contact Rating | Max DC/Peak AC Resist. | Watts | 10 | | | 10 | | | 5 | | |
| Life Expectancy-Typical [1] | Signal Level 1.0V, 10.0mA | x $10^6$ Ops. | 100 | | | 100 | | | 100 | | |
| Static Contact Resistance (max. init.) | 50mV, 10mA | Ω | 0.200 | | | 0.200 | | | 0.200 | | |
| Dynamic Contact Resistance (max. init.) | 0.5V, 50mA at 100 Hz, 1.5 msec | Ω | N/A | | | N/A | | | N/A | | |
| **RELAY SPECIFICATIONS** | | | | | | | | | | | |
| Insulation Resistance (minimum) | Between all Isolated Pins at 100V, 25°C, 40% RH | Ω | $10^{10}$ | | | $10^{10}$ | | | $10^{10}$ | | |
| Capacitance - Typical Across Open Contacts | No Shield | pF | 0.7 | | | 0.7 | | | 0.7 | | |
| | Shield Floating | pF | - | | | - | | | - | | |
| | Shield Guarding | pF | - | | | - | | | - | | |
| Open Contact to Coil | No Shield | pF | 1.4 | | | 1.4 | | | 1.4 | | |
| | Shield Floating | pF | - | | | - | | | - | | |
| | Shield Guarding | pF | - | | | - | | | - | | |
| Contact to Shield | Contacts Open, Shield Floating | pF | - | | | - | | | - | | |
| Dielectric Strength (minimum) | Between Contacts | VDC/peak AC | 250 | | | 250 | | | 200 | | |
| | Contacts to Shield | VDC/peak AC | - | | | - | | | - | | |
| | Contacts/Shield to Coil | VDC/peak AC | 1500 | | | 1500 | | | 1500 | | |
| Operate Time - including bounce - Typical | At Nominal Coil Voltage, 30 Hz Square Wave | msec. | 0.50 | | | 0.50 | | | 1.0 | | |
| Release Time - Typical | Zener-Diode Suppression [4] | msec. | 0.20 | | | 0.20 | | | 1.5 | | |

Top View:
Dot stamped on top of relay refers to pin #1 location. Grid = .1"x.1" (2.54mm x 2.54mm)




**Notes:**

[1] Consult factory for life expectancy at other switching loads.
[2] Optional diode is connected to pin #2 (+) and pin #3(-). Correct coil polarity must be observed.
[3] These relays contain bias magnets. Correct coil polarity must be observed. Pin #2(+)
[4] Consists of 56V Zener diode and 1N4148 diode in series, connected in parallel with coil.

**Environmental Ratings**

Storage Temp: -35°C to +100°C;
Operating Temp: -20°C to +85°C
Solder Temp: 270°C max; 10 sec. max
The operate and release voltage and the coil resistance are specified at 25°C. These values vary by approximately 0.4% / °C as the ambient temperature varies.
Vibration: 20 G's to 2000 Hz; Shock: 50 G's